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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/604,490

07/25/2003

Manoharprasad K. Rao

FGT 1827 PA

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12/09/2005

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SOUTHFIELD, MI 48034

EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT

PAPER NUMBER

2636

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/604,490

Applicant(s)

RAO ET AL.

Examiner

Julie Lieu

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Office action is in response to Applicant's RCE and amendment filed September 19, 2005. Claims 1 and 20 have been amended.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification fails to disclose that the sensing system aid modules and each of the at least one receiver have a plurality of associated active operating modes.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 14-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Scholfield (US Appl. 2004/0145457)

Claim 14:

Scholfield discloses a method of performing a plurality sensing system aids for a vehicle comprising:

- a. generating an object detection signal via a plurality of vision sensing systems comprising a forward vision sensor (para. [0382])
- b. operating a sensing system aid modules comprising a parking-aid module corresponding with each of said plurality of vision sensing systems via a single controller; and
- c. generating at least one safety system signal' in response to the object detection signal.

Scholfield fails to clearly states that a plurality of sensing system aid modules are used.

However, it would have been obvious to one skilled in the art to use more than one sensing system aid module in the system of Schofield because it would be desirable to operate the plurality of vision sensing systems simultaneously.

Claim 15:

The method in Schofield further comprises:

- a. generating a transmission gear signal (para. [0360]); and
- b. operating the sensing system aid module in response to the transmission gear signal
- c. generating at least one safety system signal (display) in response to the object detection signal.

Claim 16:

The method in Schofield further comprises continuously operating a side collision vision sensing system in a pre-collision sensing mode (para. [0373]).

Claim 17:

The method in Schofield also comprises operating at least one front collision sensing system in at least the parking-aid mode.

Claim 18:

Schofield also disclose a method comprising operating at least one rearward collision warning system in at least one mode selected from a parking-aid mode, a reversing-aid mode, and a pre-collision sensing mode (para. [0264]).

Claim 19:

Schofield fails to disclose the step of determining whether the vehicle is traveling below a predetermined velocity and operating the sensing system aid modules in response to the determination. Nonetheless, it would have been obvious to one skilled in the art to add this feature in the Schofield system because it would allow the system to control the movement of the vehicle more safely.

Claim 20:

Schofield discloses a vision-based object detection system for a vehicle comprising:

- a. a transmission gear sensor generating a transmission gear signal (para. [0360])
- b. a plurality of vision sensing systems having at least one vision receiver, generating an object detection signal, and operating simultaneously in a plurality of modes selected from a reversing-aid mode, a parking-aid mode corresponding to both frontal and rearward detection, a frontal pre-collision sensing mode; and
- c. a single vision processor comprising a sensing system aid modules corresponding with each of said plurality of vision sensing systems, operating the sensing system aid modules in response to the transmission gear signal, and generating at least one warning signal or one countermeasure signal in response to the object detection signal.

Schofield fails to clearly states that a plurality of sensing system aid modules are used.

However, it would have been obvious to one skilled in the art to use more than one sensing system aid module in the system of Schofield because it would be desirable to operate the plurality of vision sensing systems simultaneously.

***Allowable Subject Matter***

- 5. Claims 1-13 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julie Lieu', with a stylized, flowing script.

Julie Lieu  
Primary Examiner  
Art Unit 2636

Nov. 30, 05